

## Flare-CME of 07 March 2011 influences the Saturn

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We present a detailed study of the flare and associated halo coronal mass ejection (CME) occurred on 07 March 2011. The flare was observed at 19:43 UT and the CME at 20:00:05 UT with a linear speed of 2125 km/sec. This event triggered proton event starting at 21:30 UT. The CME varied significantly the solar wind parameters viz. velocity, temperature, density and magnetic field, and thereby, in turn induced a shock, which produced a geomagnetic storm of Dst index  $\sim -83$ nT measured on 11 March, 2011 at 05:00 UT. The solar wind velocity started to increase on 10 March 2011 at 09:00 and peak velocity was 600 km/sec measured by WIND instrument on March 14, 2011 at 13:00 UT. Further, solar wind upon approaching to the Saturn results to rapid depolarizations [1], [2] and magnetotail compression [3] observed by magnetometer [4]. We present the ELS/CASSINI observations [5], [6] made at 0.3760 latitude and at 45.8 R<sub>sat</sub> above the center of the Saturn. We studied the electrons spectra in greater detail and found that intensity of electrons enhanced in the Saturn environment by 2 orders relative to background on 10 April, 2011 between 00:34 and 00:53 UT in the energy range 0.6-28 keV [7] during sudden transition from southern lobe towards northern lobe

### References:

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